ABSTRACT

A VARIABLE SPEED MECHANISM AND METHOD FOR CONTROLLING THE SPEED OF AN ASSOCIATED LAWN MOWING APPARATUS

A variable speed mechanism for propelling an associated lawn mowing apparatus has a variable pitch pulley assembly, a belt which connects the variable pitch pulley assembly to a transmission, a control arm assembly for controlling the variable pitch pulley assembly, and a speed selector for selectively adjusting the control arm assembly. The speed selector is positioned corresponding to the desired lawn mowing apparatus ground speed. This creates tension in a cable which moves a control arm. When the control arm is moved, it rotates about a pivot shaft adjusting the position of a bearing cup which, in turn, adjusts the position of the moveable pulley half within variable pitch pulley assembly. Once the pulley assembly has been positioned, the effective belt diameter is set. If the effective belt diameter is increased, the speed supplied to the transmission is increased assuming a fixed pulley size on the transmission input. If the effective belt diameter is decreased, the speed supplied to the transmission is decreased.